

POGREBNAYA L.L.

GORSKIY, Nikolay Nikolayevich; GORSKAYA, Vera Ivanovna; SHALAGINA,
Valentina Kazimirovna; POGREBNAYA, L.L., red.; MURASHOVA, N.Ya.,
tekhn.red.

[German-Russian dictionary of oceanography] Nemetsko-russkii okeno-
graficheskii slovar'. Moskva, Gos. izd-vo tekhniko-teoret. lit-ry.
1957. 240 p. (MIRA 11:4)

(German language--Dictionaries--Russian)
(Oceanography--Dictionaries)

PERESETSKIY, A.A.

BUNIN, D.A.; DANILYUK, T.I.; PERESETSKIY, A.Z.; RAPPOPORT-PALAGUTA, B.N.;
TAVROVSKAYA, A.P.; SHUBIN, A.A.; MANOLE, M.G., redaktor; POGREBNAYA,
L.L., redaktor; MURASHOVA, N.Ya., tekhnicheskiy redaktor

[German-Russian railroad dictionary] Nemetsko-russkii zheleznodorozh-
nyi slovar'. Sost. D.A. Bunin i dr. Moskva, Gos. izd-vo tekhniko-
teoret. lit-ry, 1957. 532 p. (MIRA 10:4)

(German language--Dictionaries--Russian)
(Railroads--Dictionaries)

MEL'TSER, Yevgeniya Mikhaylovna, kand.filol.nauk; ANDRONNIKOVA, Yelena Mikhaylovna; KNYAZIATOVA, Lyudmila Ivanovna; GRABOVSKIY-ZKONOPNITS, V.A., kand.tekhn.nauk, red.; POGREBNAYA, L.L., red.; MURASHOVA, N.Ya., tekhn.red.

[German-Russian dictionary of the paper industry] Nemetsko-russkii slovar' po tselliulozno-bumazhnomu proizvodstvu. Sostavili: E.M. Mel'tser, E.M.Andronnikova i L.I.Kniaziatova. Red. V.A.Grabovskii-Zkonopnits. Moskva, Gos.izd-vo fiziko-matem.lit-ry, 1959. 235 p. (MIRA 12:4)

(German language--Dictionaries--Russian)
(Paper industry--Dictionaries)

POGREBNAYA, L. L.

ROZEN, S.Ya.. Prinsipali uchastiye: SEMEN, V.A., kand.tekhn.nauk; MAKSI-
MADZHI, A.I., kand.tekhn.nauk; NEMCHIKOV, V.I., kand.tekhn.nauk;
KHOMYAKOV, N.M., doktor tekhn.nauk. POGREBNAYA, L.L., red.;
BRUDNO, K.F., tekhn.red.

[German-Russian dictionary of water transportation] Nemetsko-
russkii slovar' vodnogo transporta. Moskva, Gos.izd-vo fiziko-
matem.lit-ry, 1959. 622 p. (MIRA 13:3)

(German language--Dictionaries--Russian)

(Shipping--Dictionaries)

GRABOV, Isaak Naumovich; AKKERMAN, D.A., red.; BARANOV, A.M., red.;
BOGOMOLOV, B.A., red.; GUSEV, N.P., red.; MURONETS, I.I.,
red.; POGREBNAYA, L.L., red.; KRYUCHKOVA, V.N., tekhn. red.

[German-Russian dictionary on welding] Nemetsko-russkii slovar'
po svarke. Moskva, Glav.red.inostr. nauchno-tekhn.slovarei
Fizmatgiza, 1962. 246 p. (MIRA 15:7)

(German language--Dictionaries--Russian)
(Welding--Dictionaries)

L 26723-66 EWT(m)/EWP(j)/T IJP(c) HW/RM

ACC NR: AR6011876

SOURCE CODE: UR/0081/65/000/016/S030/S031

AUTHOR: Vyakhirev, D. A.; Zaboltn, K. P.; Zuyeva, Ye. M.; Troitskiy, B. B.;
Vyshinskiy, N. N.; Nikolayeva, M. V.; Pogrebnaya, T. I.; Fomicheva, L. V.

TITLE: Gas chromatography study of impurities in methylmethacrylate and analysis of
their effect on the process of polymerization

SOURCE: Ref. zh. Khimiya, Abs. 16S214

TOPIC TAGS: methanol, methylmethacrylate, glycol, polymerization rate, molecular
weight, monomer

ABSTRACT: With the use of the gas chromatography method on an INZ-600 brick with a
selective liquid phase of polyethylene glycol 1000, it has been determined that the
basic admixtures in industrial methylmethacrylate are dimethyl ether, methylformate,
methylpropionate, methanol, methyl-3-methoxypropionate, and three unidentified sub-
stances. An investigation was made of the effect of supplementing the detected ad-
mixtures to methylmethacrylate on the polymerization rate and the molecular weight
of the polymer obtained by standard methods in emulsion at 40C. It was shown that
up to 2% methanol increases the polymerization rate and the molecular weight. Above
1% methylformate decreases the molecular weight and above 3% decreases the polymeri-
zation rate. Methylpropionate sharply decreases the molecular weight and the poly-
merization rate at a concentration of 0.5 to 1%. Acetaldehyde has no effect on the

Card 1/2

L 26723-66

ACC NR: AR6011876

polymerization rate, but it decreases the molecular weight. The addition of polymethylmethacrylate to a monomer causes an increase in the polymerization rate and a decrease in the molecular weight. Hydroquinone, added to the monomer as the inhibitor, causes a sharp drop of the polymerization rate and the molecular weight. V. Kopylov.
[Translation of abstract] [NR]

SUB CODE: 11,07/ SUBM DATE: none/

Cord 2/2

ZHUKHOVITSKIY, A.A.; TURKEL'TAUB, N.M.; MALYASOVA, L.A.; SHLYAKHOV, A.F.;
NAUMOVA, V.V.; POGREBNAYA, T.I.

Chromatography without gas carriers. Zav. lab. 29 no.10:1162-
1166 '63. (MIRA 16:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut yadernoy
geofiziki i geokhimii.

ZABRODSKIY, A.G.; PSALOM, P.G.; POGREBNAYA, V.F.

Obtaining feed yeasts from ~~distard~~ molasses. Spirt.prom. 29 no.2:32-39
'63. (MIRA 16:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut spirtovoy i likero-
vodochnoy promyshlennosti.
(Distilling industries—By-products) (Yeast)

ZABRODSKIY, A.G.; PSAIOM, P.G.; POGREBNAYA, V.F.

Separation of alcohol fermentation yeasts from mClassses
stillage. Trudy UkrNIISP no.9:90-99 '64.

(MIRA 17:10)

FINKEL'SHTYIN, A.V.; POGREBNAYA, V.I.; LUK'YANCHUK, S.V.

Solratokhromizm of some substituted p-aminocarbenes and Hammett's constants. Zhur.fiz.khim. 33 no.8:2092 Ag '64.

(MIRA 1:64)

1. Sibirskiy tekhnologicheskii institut.

S/137/62/000/003/163/191
A160/A101

18.8310
AUTHORS:

Rabkin, M. A.; Dorofeyev, D. S.; Torgovitskaya, S. B.;
Pogrebnaya, Ye. S.

TITLE:

The protection of low-carbon steel by a metallized layer from
stainless chrome-nickel steel

PERIODICAL:

Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 13, abstract 3069.
(Sb. nauchn. tr. Zhdanovsk. metallurg. in-t, 1960, vyp. 6, 262 - 274)

TEXT:

To ascertain the protective action of a stainless steel sprayed on
a non-alloyed low-carbon steel, determined were the corrosion rate and the elec-
tronic potentials of test pieces made from CT3 (St.3) steel and metallized with
1x18H9T (1x18N9T) steel. Plates from St.3 steel, each measuring 80x40x3 mm, were
used as samples. Before spraying-on the stainless-steel layer, the pieces were
etched in HCl and degreased with CCl₄. Then the samples were coated with the
stainless 1x18N9T steel. The whole surface of the sample, including its ends,
were metallized. The protective action of the coating on the rate of dissolving
of the plates was determined in aqueous solutions of H₂SO₄, HNO₃ and HCl with

Card 1/2

The protection of low-carbon steel by a

S/137/62/000/003/163/191

A160/A101

different concentrations. The electrode potentials of the pieces were measured in H_2SO_4 and HNO_3 solutions. The experiments yielded the following results: (1) The resistance of the metallized samples in HCl is lower than the resistance of a low-carbon steel. (2) The resistance of metallized samples in H_2SO_4 depends on the concentration of the latter. The maximum corrosion rate of metallized pieces is observed, in contrast to the samples made from St.3 steel, in a 15 % solution of H_2SO_4 , i.e., the passivation of metallized pieces appears at a lower concentration of acid as compared to non-metallized samples. (3) The electrode potential of the metallized steel in H_2SO_4 is more positive than the electrode potential of the non-metallized steel, and grows with an increase in the concentration of acid. (4) The resistance of the metallized steel in HNO_3 is 3,000 times higher than the resistance of a non-metallized steel. (5) The higher the concentration of HNO_3 and the longer the duration of its action, the lower the corrosion rate of metallized samples. Compared to a low-carbon steel which passivates in a 60 - 80 % solution of HNO_3 , the metallized pieces undergo passivation in a 30 % solution of HNO_3 .

V. Tarisova

[Abstracter's note: Complete translation]

Card 2/2

POGREBNIKOV, M.M.; ROTSHEYN, A.Ya.; TSIREL', V.S.

Studying and calculating variations in using nuclear resonance
apparatus. Trudy VITR no.3:258-267 '61. (MIRA 15:7)
(Krasnovodsk region—Magnetic prospecting)

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3,
pp 6-7 (USSR) 15-1957-3-2608

AUTHOR: Pogrebnov, N. I.

TITLE: The Middle and Upper Carboniferous of the Kuban'-
Laba Region in the Northern Kavkaz (Caucasus)
(Sredniy i verkhniy karbon Kubano-labinskaya rayona na
Severnem Kavkaze)

PERIODICAL: Tr. Labor. geol. uglya AN SSSR, 1956, Nr 6, pp 350-357

ABSTRACT: The Middle Carboniferous rocks, which lie unconformably
on Lower Carboniferous and older Paleozoic rocks, con-
sist of conglomerates and coarse-grained sandstones
(piedmont facies), fine-grained and siliceous shales
(lacustrine facies), coals and carboniferous shales
(paludal facies), and also volcanic formations. The
author distinguishes sedimentary cycles (locally four
in number), in which lacustrine-paludal formations sub-
sequently give way to rocks of the piedmont facies and
to volcanic rocks. This systematic arrangement is the

Card 1/3

15-1957-3-2608

The Middle and Upper Carboniferous of the Kuban'-Laba Region in the Northern Kavkaz (Caucasus) (Cont.)

basis for the stratigraphic subdivision of the Middle Carboniferous, in which four series are differentiated (from the base upward): C₂, C₂, C₂, and C₂. Studies of the lithology, petrography, and fossil plants confirm the proposed subdivision and also the Westphalian age of the corresponding part of the section; the lower horizon of the Westphalian is missing. The thickness of the Middle Carboniferous ranges from 400 m (Urup River) to 600 to 700 m (Teberda River). The Upper Carboniferous consists of sandstone-conglomerate beds, provisionally subdivided by the author into two series, C₃ and C₃. The total thickness of the Upper Carboniferous rocks is 200 to 500 m. The upper Paleozoic rocks are involved in the complex structures of the Peredovoy Range, in which the author has distinguished the Glavnyy (Principal) anticline with a northwesterly trend. The crest of this anticline is complicated by transverse uplifts and downwarps. North of the Glavnyy anticline there occurs the Teberda syncline. Coal deposits are confined to the transverse downwarps. The Labinskoye, Tolstobugorskoye, Kyafaro-Bogoslovskoye, Marukh-Aksautskoye, and Teberdinskoye mestorozhdeniye (fields) were

Card 2/3

POGREBNOV, N.I.

Some problems of the regional stratigraphy and tectonics of
the lower Don and Volga Valleys. Sov. geol. 7 no.8:158-162
Ag '64. (MIRA 17:10)

1. Volgo-Ural'skoye geologicheskoye upravleniye.

POGREBNOV, N.I.; ZUBTSOVSKIY, V.N.; TOMKOVICH, I.I.

~~Some aspects of methods used in geological prospecting for coal~~
in the buried eastern section of the greater Donets Basin. Razved.
1 okh.nedr 22 no.12:23-26 D '56. (MLRA 10:2)

1. Rostovskaya geologicheskaya ekspeditsiya.
(Donets Basin--Coal geology) (Prospecting)

POGREBNOV, N. I. Cand Geol-Min Sci -- "^{Middle}~~Central~~ and ^{if new periods}Upper Carbon of the northern
Caucasus. Geological structure, history of ~~the~~ formation of coal-bearing
strata, and ^{Assessment}~~evaluation~~ of ~~the~~ industrial prospects of ^{the} coal deposits." Rostov-on-Don,
1961 (Min of Higher and Secondary Specialized Education RSFSR. Rostov State
Univ). (KL, 4-61, 190)

POGREBNOV, N.P. [Pohrebonov, N.P.]

Formation of coal seams in the Carboniferous of the Northern
Caucasus. Geol. zhur. 19 no.5:82-85 '59. (MIRA 13:2)
(Caucasus, Northern--Coal geology)

POGREBNOY, A.

Proizvodstvenno-tekhnicheskaya propaganda v klube. Iz opyta raboty Dvortsa kul'tury
Dneprodzernskogo metallurgicheskogo zavoda im. Leninskogo [Propagating production
and technology in the club; experience of the Palace of Culture of the Dneprodzernsk
metallurgical plant]. Moskva, Profilstat, 1952. 64 p. (3-ohia kul'turno-nauchnaya).

SO: Monthly List of Russian Acquisitions, Vol. 7, No 3, June 1954.

TILICHENKO, A.G., kand. tekhn. nauk (Khabarovsk); POGREBNOY, A.K., inzh.
(Khabarovsk); MAZUR, N.N., inzh. (Khabarovsk)

Use of electronic computers for the calculation of technical
norms in operational work. Zhel. dor. transp. 46 no.1:78
Ja '64. (MIRA 17:8)

1. Nachal'nik sluzhby dvizheniya Dal'nevostochnoy dorogi
(for Pogrebnoy).

POGREBNOY, Aleksey Yevtkhiyevich; KACHALIKINA, E.A., redaktor; KIRSANOVA,
tekhnicheskii redaktor

[Dissemination of technical information in the club] Proizvodstven-
no-tekhnicheskaya propaganda v klube. 2-oe perer. izd. [Moskva]
Izd-vo VTsSPS Profizdat, 1954. 87 p. (MLRA 8:7)
(Technical education)

POGREBNOY, A.Ye.

Improve the quality of scrap metal being supplied. Metallurg
5 no.9:34-35 S '60. (MIRA 13:8)

1. Nachal'nik otdela sbyta i transporta Ukrglavvtormeta.
(Scrap metals)

BUNIN, K.P., ^FPOGREBNOY, ^FB.N.

On the mechanism of the effect of tempering in the graphitization of steel. Dop. AN URSS no.5: 481-487 '55. (MLRA 9:3)

1. Chlen-korespondent AN URSS (for Bunin). 2. Dnipropetrovs'kiy metallurgiyinyi institut ta Institut chornoj metalurgii AN URSS.
(Steel---Metallography)

POGREBNOY, Ye. N.

✓ Mechanism of the effect of quenching on graphitization.
K. P. Bunin and E. N. Pogrebnoy. *Litmet Proizvodstva*
1935, No. 8, 25-7. —Published opinions on the effect of pre-
vious quenching on graphitization, which are reviewed, do
not agree. When the effect of quenching is assoc. with
microscopic quenching cracks, austenitization prior to
graphitization cannot affect the results, but when it is con-
nected with stresses in the carbide phase, carbide transfor-
mation or diffusion, carbide and ferrite mixt. assoc. with
martensite decompn., even a short austenitization destroys
their effect completely. A 0.93% C, 1.08 Si, 0.38 Mn steel
in the as-cast state consisted of fine pearlite and graphitiza-
tion at 880° for 10 hrs. did not change this structure, but
water quenching from 1100° before heating graphitized it
completely. Following quenching by an austenitizing
treatment at 900-1200° before graphitizing completely
destroys the effects of the former, requiring a shorter time
for a higher temp.; 5 hrs. at 900° being a representative
min. Graphitization is largely favored by the formation of
microscopic cracks and distortion of space lattice produced

by quenching. Subsequent heating rapidly fills them with C
serving as nuclei for graphite.
I. D. Gat

of ①

POGREBNOY, Ye. N

Defects in the crystalline structure of hardened steel. K. P. Bunin and E. N. Pogrebnol. *Izvest. Akad. Nauk S.S.S.R., Otdel. Tekh. Nauk* 1955, No. 12, 1309. --Larger structure deformations, the hardening microfractures, are formed during the hardening of Fe-C alloys in the martensite and austenite structures, in addition to the minor dislocations, voids, and other equil. distortions. The study of the larger distortions can be facilitated by filling the fractures with graphite, because the deposition and growth of graphite inclusions results in the displacement of the relatively little-mobile atoms of the matrix (Fe, Cr, Mn, Si, etc.) where graphite is formed. Samples of Si steel contg. C 0.92, Si 1.34, Mn 0.37, P 0.040, and S 0.32% were water-quenched from 1200°, after keeping them at that temp. for 5-120 min., and annealed at 680° for 10 hrs. for a graphitizing anneal. Microphotographs of the samples so treated for a different time are shown.

W. M. Sternberg.

(1)

^N
POGREBROY, E. N.
USSR/ Physics - Metallurgy

Card 1/1 Pub. 22 - 16/50

Authors : Bunin, K. P. and Pogrebroy, E. N.

Title : The effect of hardening their graphitization of ferrocabon alloys

Periodical : DOK. AN SSSR 100/1, 61-63, Jan. 1, 1955

Abstract : Experiments were conducted to determine the effect of preliminary hardening of white cast iron on its graphitization. The effect obtained is connected with martensitic transformation of austenite. Seven USSR References (1952-1959). Illustrations.

Institution : The I. V. Stalin Dnepropetrovskiy Metallurgical Institute

Presented by : Academician G. V. Kurdyumov, July 3, 1954

POGREBNOY, E. N.

"Investigation of the mechanism and kinetics of graphitization of tempered steel." Min Higher Education Ukrainian SSR. Dnepropetrovsk Order of Labor Red Banner Metallurgical Inst imeni I. V. Stalin. Dnepropetrovsk, 1956. (Dissertation for the of Candidate in Technical Sciences).

SO: Knizhnaya letopis', No. 16, 1956

SOV/163-58-1-52/53

AUTHOR:

Pogrebnoy, E.N.

TITLE:

The Effect of Silicon on the Graphitization of Previously Hardened Steel (O vliyaniy kremniya na grafitizatsiyu predvartel'no zakalennoy stali)

PERIODICAL:

Nauchnyye doklady vysshey shkoly. Metallurgiya, 1958, Nr 1, pp 275 - 278 (USSR)

ABSTRACT:

The effect of silicon on the graphitization of previously hardened steel was investigated. The degree of graphitization was determined by the change in the density as well as by the microstructure. Modifications of the density were found in the graphitization of hardened and not hardened silicon containing steels. It was found that the graphitization in hardened samples takes place more rapidly than in non-hardened samples. The degree of graphitization in hardened and non-hardened steels increases with the increase in the silicon content. The number of centers and the rate of graphitization increase rapidly after a previous hardening of the steels containing silicon. By the change in the degree of graphitization of steels previously hardened at 1000 - 1050° it may be seen that the rate of graphitization does not only depend on the silicon content but also on the temperature of

Card 1/2

The Effect of Silicon on the Graphitization of
Previously Hardened Steel

SOV/163-58-1-52/53

hardening. A hardening of the steel at 1000° C has a greater effect on the number of centers and on the rate of graphitization than does a hardening at 1100° C. (The number of centers and the rate of graphitization depend strongly on the temperature of hardening.)

In the previously hardened steels the effect of silicon on the graphitization causes an acceleration of the increase in volume of the graphitization inclusions. In the formation of the nuclei of the graphitization centers the role played by silicon is of second order.

The rate of graphitization in hardened and non-hardened steels also depends to a high degree on the annealing temperature. The mechanism of the accelerated increase in volume of the graphite inclusions in hardened and non-hardened steels is discussed. Silicon accelerates the transport of the atoms at the boundaries of the nuclei and affects the form of the increasing graphite inclusions. There are 3 figures, 1 table, and 12 references, 12 of which are Soviet.

Card 2/2

ASSOCIATION:

Dnepropetrovskiy metallurgicheskii institut (Dnepropetrovsk Metallurgical Institute)

SUBMITTED:

October 1, 1957

SOV/163-58-3-44/49

AUTHORS: Baranov, A. A., Bunin, K. P., Pogrebnoy, E. N.

TITLE: On the Mechanism of the Influence of a Previous Deformation on the Graphitization of Steel (O mekhanizme vliyaniya predvaritel'noy deformatsii na grafitizatsiyu stali)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Metallurgiya, 1958, Nr 3, pp 258-260 (USSR)

ABSTRACT: Investigations of the graphitization of steel show that the occurrence of microfissures and defects formed in the deformation of the steel sample influence the graphitization process. In the deformation of the perlite samples traces of microfissures occur after the deformation process. The deformation was carried out within 24 hours at 680°C. The degree of graphitization was traced by the alteration of the density and the microstructure. It was found that in deformed steels the graphitization process takes place more rapidly than in the initial product. The formation and widening of the graphitization inclusions, especially in the beginning of burning, begins with the occurrence of the cracks in the samples. The graphitization process is accelerated most by the occurrence of cracks in the deformed

Card 1/2

SOV/163-58-3-44/49

On the Mechanism of the Influence of a Previous Deformation on the Graphitization of Steel

sample.

When storing the steel sample in the austenite state the influence of the previous deformation on the graphitization process is comparatively small. To completely remove this influence it is necessary to store the steel sample in an austenite state for a longer period of time.

There are 3 figures and 13 references, 10 of which are Soviet.

ASSOCIATION: Dnepropetrovskiy metallurgicheskii institut (Dnepropetrovsk Metallurgical Institute)

SUBMITTED: October 1, 1957

Card 2/2

SOV-21-58-9-12/28

AUTHORS: Bunin, K.P., Corresponding Member of the AS USSR, Parunov, A.A. and Pogrebnoy, E.N.

TITLE: Spheroidization, Coalescence and Graphitization of Cementite in Deformed Perlite (Sferoidizatsiya, koalestsentsiya i grafitizatsiya tsementita v deformirovannom perlite)

PERIODICAL: Dopovidi Akademii nauk Ukrain's'koi RSR, 1958, Nr 9, pp 961 - 965 (USSR)

ABSTRACT: The processes of spheroidization, coalescence and graphitization of eutectoid cementite are possible in steels and cast iron whose structure contains perlite. These processes are accelerated after a preliminary deformation. The mechanism of this acceleration has not been sufficiently clarified. Therefore, the authors undertook to investigate the effect of deformation upon these processes. The cast open-hearth steel of the following composition: 0.94% C, 0.99% Si, 0.56% Mn, 0.014% P and 0.029% S was used for the studies. As a result of microscopic investigations of annealed deformed perlitic silicon steel, it was established that spheroidization, coalescence and graphitization of cementite are considerably accelerated in the traces of sliding and creases, in particular at the points of their intersection. This acceleration is explained by the facilitation of the motion of

Card 1/2

SOV-21-58-9-12/28

Spheroidization, Coalescence and Graphitization of Cementite in Deformed Perlite

atoms in a metallic matrix due to accumulation of dislocations and vacancies in the traces of deformation and also to arising injuries of continuity (microcracks). There are 4 sets of photos and 15 references, 11 of which are Soviet, 3 English and 1 German.

ASSOCIATION: Institut chernoy metallurgii AN UkrSSR (Institute of Ferrous Metallurgy of the AS UkrSS); Dnepropetrovskiy metallurgicheskii institut (Dnepropetrovsk Metallurgical Institute)

SUBMITTED: March 4, 1958

NOTE: Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration.

1. Iron carbides--Metallurgy 2. Steel--Properties 3. Cast iron--Properties 4. Pearlite--Metallurgical effects

Card 2/2

BUNIN, K.P.; GRECHNYY, Ya.V.; MALINCHKA, Ya.N.; TARAN, Yu.N.; BEL'CHENKO, G.I.;
POGREBANYI, E.N.; DANIL'CHENKO, N.M.; YATSENKO, A.I.; RYBIN, A.K.;
BARANOV, A.A.; SHPAK, T.M.

Is metastable austenite possible at a point higher than A_1 ?
Izv.vys.ucheb.zav.; chern.met. no.10:143-144 0'58.

(MIRA 11:12)

1. Dnepropetrovskiy metallurgicheskiy institut i Institut chernoy
metallurgii AN USSR.
(Austenite) (Phase rule and equilibrium)

KOSTENETSKIY, O.N.; POGREBNOY, A.Ye.

Using scrap metal in the oxygen-blown converter method
of steel production. Met. i gornorud. prom. no.6:
18-21 N-D '65. (MIRA 18:12)

69335
S/129/60/000/05/015/023
E091/E235

18 7100

AUTHORS: Pogrebnoy, E. N., and Taran, Yu. N., Candidates of
Technical Sciences

TITLE: Effect of Quenching⁴
and Steel

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,
1960, Nr 5, pp 48-52 (USSR)

ABSTRACT: Carbides dissolve in carbon steels and medium alloy
steels at 900°C within 3 to 5 mins (Ref 6) and at above
950°C within a fraction of a minute (Fig 1, curve 3).
Graphite produced by heating quenched steel also
dissolves rapidly. In order that the vacancies in the
matrix, formed when graphite dissolves, should heal up,
lengthy soaking is required. Hence, during austenisation
(1 hour at 900°C) of steel which had been quenched and
tempered at 450°C (to cause formation of ϵ -carbide),
the carbide phase and graphite nuclei dissolve completely
in the austenite and any effect of the ϵ -carbide on
subsequent graphitization of the steel must cease. If
the effect of preliminary quenching does not disappear, on
austenitizing it cannot be associated with the presence

Card 1/4

69335

S/129/60/000/05/015/023
E091/E235

Effect of Quenching on the Graphitization of Cast Iron and Steel
of the ϵ -carbide and graphite nuclei. Gulyayev et al
(Ref 8), Yakovleva et al (Ref 9) and Bunin et al
(Refs 10 and 11) have shown that numerous quench
microcracks (Figs 2 and 3a) form in the matrix crystals
during the martensitic transformation. On graphitization
annealing, numerous graphite inclusions form in the
quench microcracks. It can be distinctly seen in steel
quenched from high temperatures that the graphite
inclusions form preferentially in the microcracks of
former martensitic plates or in their joints (Figs 2
and 3). The number of graphite inclusions forming on
annealing quenched steels and cast irons increases
rapidly with the drop in temperature. The retention
of the effect of preliminary quenching after austeni-
tization is due to the presence of quench cracks.
Damages and distortions arising in steel during the
martensitic transformation disappear only after lengthy
soaking of the specimens in the austenitic range. In
order to find time required for austenitization to
proceed to completion (i.e. for the effect of quench
defects on graphitization to disappear), specimens of

Card 2/4

69335

S/129/60/000/05/015/023
EO91/E235

Effect of Quenching on the Graphitization of Cast Iron and Steel

quenched steel, prior to graphitization, were heated and isothermally soaked for various lengths of time at 900, 940, 970, 1000 and 1100°C. These specimens were subsequently graphitized for 10 hours at 680°C in order to "expose" the damages in the matrix of the steel (Ref 5). Fig 4 shows a plot of the change of the number of graphite inclusions forming on annealing quenched steel as functions of the temperature and duration of austenitization prior to graphitizing annealing. The rate at which the damages (microcracks) and distortions of crystals of quenched steel heal in relation to austenitization temperature (at 900 to 1100°C) has an exponential character (see Fig 1, curve 1) and agrees with the results (curve 2) obtained by Bunin and Pogrebnoy (Ref 5). In the opinion of the authors, of this paper, the main reason for the acceleration of graphitization of quenched steels is the presence of quench damages and distortions of the matrix crystals. The dimensional and structural relationship between austenite and graphite has been shown by Repin and

Card 3/4

69335

S/129/60/000/05/015/023
E091/E235

Effect of Quenching on the Graphitization of Cast Iron and Steel
Taran (Ref 12). A comparison between the atomic packing
of carbon in the basal plane of graphite and the
arrangement of unit cells in the octohedral plane of
austenite (these being the most convenient places for
carbon atoms) shows that the octohedral plane can be
a good basis for the formation of graphite layers. The
parameter deformation does not exceed 2.1% (Fig 5a).
It has been found that ferrite can have a similar value
(Fig 5b). In this case, the deformation associated
with the spacing of iron atoms in the octohedral plane
does not exceed 4%. From this it follows that the basic
phases of iron alloys, austenite and ferrite, can be an
even better basis for the formation of graphite than
 ϵ -carbide, for which the lattice deformation is 5%
(Fig 5B). There are 5 figures and 14 references, 9 of
which are Soviet, 4 French and 1 English

ASSOCIATION: Dnepropetrovskiy metallurgicheskii institut
(Dnepropetrovsk Institute of Metallurgy)

Card 4/4

BUNIN, Konstantin Petrovich; BARANOV, Aleksandr Aleksandrovich; POGREBNOY,
~~Emil' Nikiforovich~~; KISINA, I.V., red. izd-va; LISOVETS, A.M.,
tekh. red.

[Graphitization of steel] Grafitizatsiia stali. Kiev, Izd-vo
Akad. nauk USSR, 1961. 84 p. (MIRA 14:9)
(Steel—Metallography) (Annealing of metals)

S/180/61/000/001/004/015
E071/E433

AUTHOR: Pogrebnoy, E.N. (Dnepropetrovsk)

TITLE: Coalescence, Spheroidization and Closing Up of
Micropores and Microcracks in Iron Alloys

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh
nauk, Metallurgiya i toplivo, 1961, No.1, pp.58-63

TEXT: Processes of recovery of defective crystals, coalescence, spheroidization and closing up of micropores and microcracks during homogenization (austenization) of cast, deformed and heat treated steel were investigated. For the detection of defects in the matrix of graphitized steels, the graphitization method was used (Ref.4). The experiments were carried out on a cast steel (0.92% C; 1.34% Si; 0.37% Mn; 0.04% P; 0.033% S; 0.02% Cr; 0.03% Ni) which, in the initial state, had a fine pearlitic structure. One series of specimens (10 x 10 x 15 mm) of this steel was cold worked (with about 30% reduction), the second was hardened for martensite (from 1100°C in water). High temperature treatment of specimens in the austenitic state (homogenization) was used for the redistribution and closing up of defects and distortions. After various isothermal treatments at 900, 940, Card 1/5

Coalescence, Spheroidization ...

S/180/61/000/001/004/015
E071/E433

970, 1000, 1100 and 1200°C, the specimens were graphitized (10 hours at 680°C) for the development of defects in the metallic matrix. Micro-investigation of specimens graphitized after the homogenization indicated that the number of graphite inclusions, formed in the matrix defects, changes depending on the nature of the preliminary treatment and temperature and duration of the homogenization process. The changes are discussed and illustrated in microphotographs; plot Fig.2 shows the influence of temperature and duration of the homogenization (τ , hours) on the number of graphite inclusions (n units/mm²) formed during graphitization of the preliminary homogenized and deformed (Fig.2a), cast (Fig.2b) and hardened (Fig.2B) steel. On the basis of experimental results, it appears that defects and distortions in the polycrystalline matrix of cast and preliminarily worked steels are slowly redistributed, coalesce, spheroidize and finally close up on high temperature soaking in the austenitic state. During the process of coalescence of pores, they are redistributed in respect of number and size; their size increases whilst their number decreases. The coalescence of pores speeds up with increasing temperature. Micropores situated on grain boundaries coalesce faster than those

Card 2/5

Coalescence, Spheroidization ...

S/180/61/000/001/004/015
E071/E433

situated inside austenitic grains. At comparatively low homogenation temperatures, processes of spheroidization and closing up counteract the spreading of boundary pores along the grain boundaries. With increasing temperature, the ability of pores to grow along the grain boundaries increases (at 1200°C boundary pores grow to a considerable size appearing in a shape of boundary fissures forming the base for the formation of graphite network). As the micropores grow and their size equalization progresses and also due to increasing diffusion distances and perfection of the crystals (decrease in the concentration of vacancies and dislocations) the process of coalescence will slow down. This is aided by simultaneous processes of spheroidization and closing up of pores, particularly when their velocity begins to exceed that of coalescence of pores. During the spheroidization process, micropores with variable curvature spheroidize, their surface area decreases and so does the free energy related to it. During spheroidization, fissures at first divide into smaller ones and then are transformed into equiaxial ones enclosed by faces related to the structure of metallic matrix (in the case of austenite - octahedron and cube). With increasing temperature,

Card 3/5

Coalescence, Spheroidization ...

S/180/61/000/001/004/015
E071/E433

spheroidization of micropores is speeded up. The coalescence and spheroidization processes aid in some way the closing of defects and distortions in crystals. The closing up of defects near the surface of specimens is faster than inside. With improvement of the matrix, the velocity of heating of defective crystals decreases. The energy of activation of this process is about 28000 to 31000 cal/mole. It is concluded that the processes of redistribution of defects and distortions in the matrix, taking place due to diffusion and dislocation, play a considerable role during the homogenation process. They can have a considerable influence on diffusion and on the nature of structural and phase transformations in metals and alloys and on their physico-chemical properties and, therefore, should be taken into consideration during the homogenation process. There are 4 figures and 6 Soviet references. ✓

ASSOCIATION: Dnepropetrovskiy metallurgicheskiy institut
(Dnepropetrovsk Metallurgical Institute)

SUBMITTED: July 13, 1960

Card 4/5

POGREBNOY, E.N. (Dnepropetrovsk)

Behavior of structural defects during the homogenizing of
steel being graphitized. Izv. AN SSSR. Met. 1 gor. delo
no.4:123-126 J1-Ag '64. (MIRA 17:9)

L 63340-65 EPT(c)/EPR/ENG(j)/EIA(c)/EIT(m)/ENP(i)/ENP(b)/T/EIA(d)/ENP(w)/ENP(e)/ENP(t)

ACCESSION NR: AP5017481 Pr-4/PS-4 JAJ/WH/WW/JD UR/0370/65/000/003/0187/0191
539.4.015/019

AUTHOR: Pogrebnoy, E. N.; Zhak, K. M.

TITLE: On intergranular fracture of metals

SOURCE: AN SSSR. Izvestiya. Metally, no. 3, 1965, 187-191

TOPIC TAGS: intergranular fracture, metal deformation, metal fracture, dislocation structure, cohesive strength, intergranular deformation, ferrosilicon, graphite stain, thermal stress, microcrack, slip

ABSTRACT: In the process of the deformation of metals, fracture may occur owing to the formation of cracks inside and between the grains. Intergranular cracks as a rule appear at the site of contact between three grains or in other "interlocked" sectors of intergranular boundaries at which stresses may mount until they exceed the cohesive strength of the grains. In this connection, the authors present the results of an investigation of changes in the dislocation structure in the presence of intergranular deformation and fracture, as well as of the possibility of detecting intergranular fracture in its early stages in Fe-C-Si alloys in which flaws in cohesion can be detected by microscopic detection of graphite stains, since graphite is released more rapidly at the surface of pores and small cracks than in the compact matrix. Specimens of ferrosilicon (0.028-0.035% C and 2.90-3.35% Si), 20 mm in diameter, were hardened and subsequently quenched in water. The rapid cooling

Card 1/3

L 63340-65

ACCESSION NR: AP5017481

produced considerable thermal stresses resulting in a marked deformation. Prior to the annealing the structure consisted of large ferrite crystals and a small amount of carbides and pearlite. Annealing of the specimens (to stain the cracks with graphite) was performed at 650, 700, 750, and 800°C for from 1 to 24 hr. After the annealing the structure was found to include sectors in which graphite concentrates at the boundaries between two or three grains or inside one of the grains. The detection of intergranular microcracks is facilitated by tracing the graphite. This, together with the possibility of detecting the dislocation structure in ferrosilicon, makes it possible to analyze the nature of the stressed state at the point of contact between grains and the stress relaxation during intergranular deformation and fracture. Thus, the possibility of the formation of cracks in the presence of intergranular deformation is confirmed. The intergranular cracks catalyze graphite formation during annealing. The graphite, following the form and nature of the cracks, facilitates the detection of intergranular fracture in carbon-containing ferrosilicon. An analysis of the dislocation structures suggests the conclusion that intergranular deformation and fracture are accompanied by a considerable build-up of dislocations at grain boundaries, arising as a result of the action of sources close to or at the contact between grains. Intergranular deformation with the formation of microcracks localizes in the neighborhood of the sites of contact between three grains and along the grain boundaries at sites of fracture, at sites of con-

Card 2/3

L 63340-65

ACCESSION NR: AP5017481

produced considerable thermal stresses resulting in a marked deformation. Prior to the annealing the structure consisted of large ferrite crystals and a small amount of carbides and pearlite. Annealing of the specimens (to stain the cracks with graphite) was performed at 650, 700, 750, and 800°C for from 1 to 24 hr. After the annealing the structure was found to include sectors in which graphite concentrates at the boundaries between two or three grains or inside one of the grains. The detection of intergranular microcracks is facilitated by tracing the graphite. This, together with the possibility of detecting the dislocation structure in ferrosilicon, makes it possible to analyze the nature of the stressed state at the point of contact between grains and the stress relaxation during intergranular deformation and fracture. Thus, the possibility of the formation of cracks in the presence of intergranular deformation is confirmed. The intergranular cracks catalyze graphite formation during annealing. The graphite, following the form and nature of the cracks, facilitates the detection of intergranular fracture in carbon-containing ferrosilicon. An analysis of the dislocation structures suggests the conclusion that intergranular deformation and fracture are accompanied by a considerable build-up of dislocations at grain boundaries, arising as a result of the action of sources close to or at the contact between grains. Intergranular deformation with the formation of microcracks localizes in the neighborhood of the sites of contact between three grains and along the grain boundaries at sites of fracture, at sites of con-

Card 2/3

BONIN, E.P.; KANISH, V.B.; POHREBNY, E.N. [Pohribnyi, E.N.]

Dissolution of cementite in the austenite of steel. No. 1.
AN UkrSSR no.3:336-338 '65. (Ukr. 16:3)

1. Dnepropetrovskiy metallurgicheskii institut. N. (Dnepropetrovsk)
pendent AN UkrSSR (for Bonin).

L 24472-66 EWT(m)/EWP(w)/I/EWP(t) IJP(c) JD/GS

ACC NR: AT6010575

(N)

SOURCE CODE: UR/0000/65/000/000/0064/0072

AUTHOR: Pogrebnoy, E. N.; Zhak, K. M.

35
B11

ORG: Dnepropetrovsk Metallurgical Institute (Dnepropetrovskiy metallurgicheskiy institut)

TITLE: Intergranular deformation and fracture

19

SOURCE: AN UkrSSR. Mekhanizm plasticheskoy deformatsii metallov (Mechanism of the plastic deformation of metals). Kiev, Naukova dumka, 1965, 64-72

TOPIC TAGS: crystal deformation, ferroalloy, silicon alloy, material fracture

ABSTRACT: The authors study changes in dislocation structure during intergranular deformation and fracture and the possibilities for intergranular fracture in the early stages of deformation in alloys where the fractures may be decorated by graphite which is segregated more rapidly on the surfaces of pores and cracks than in a dense matrix. Specimens of ferrosilicon with 0.028-0.35% C and 2.90-3.35% Si were hardened and quenched in water. The specimens were 20 mm in diameter. Rapid cooling caused high thermal stresses resulting in considerable deformation. The

19

Card 1/2

2

L 24472-66

ACC NR: AT6010575

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specimens were annealed at 650, 700, 750 and 800° with holding from 1 to 24 hours. Analysis of the dislocation structure in annealed specimens showed that intergranular deformation is accompanied by considerable accumulation of dislocations at the grain boundaries. The dislocations form complex patterns in boundary regions and at points where 3 grains come together. Intergranular deformation penetrates deeply into the crystal. The nature of the intergranular deformation is complicated by twins or slip bands at the contact boundary between 2 or 3 grains. At points of juncture between a twin and an intergranular boundary, "flare-shaped" plastic deformation regions are observed which spread out from the juncture deep into the adjacent grain. These flares consist of fibrous and branching slip lines which are characteristic for metals with a bcc lattice. The dislocation density in these zones is high and irregular. The experimental data indicate that cracks may be formed during intergranular deformation. The dislocations which accumulate at the grain boundaries during intergranular deformation and fracture are due to sources located close to the grain boundaries. Orig. art. has: 6 figures.

SUB CODE: 11/ SUBM DATE: 04Sep64/ ORIG REF: 005/ OTH REF: 004

Card 2/2 *ll*

POGREBNOY, E.N., kand. tekhn. nauk; KHEYFETS, I.G., kand. tekhn. nauk

Graphitizing hardened white cast iron. Lit. proizv. no.9:24-25 S
'65. (MIRA 18:10)

BUNIN, K.P.; ZAKORKO, Zh.B.; POGREBNOY, E.N. [Pohribnyi, E.N.]

Kinetics of graphite precipitation in hypereutectoid silicon steel.
Dop. AN URSR no.9:1194-1197 '62. (MIRA 18:4)

1. Institut ochernoy metallurgii AN UkrSSR. 2. Chlen-korrespondent
AN UkrSSR (for Bunin).

POGREBNOY, E.N. (Dnepropetrovsk)

Processes of the formation and the elimination of porosities during
the homogenization of hypereutectoid steel. 1 v. AN SSSR. Met. no.1:
119-123 Ja-F '65. (MIRA 18:5)

BUNIN, K.P. (Dnepropetrovsk); ZAKORKO, Zh.B. (Dnepropetrovsk); POGREBNOY, E.I.
(Dnepropetrovsk)

Structure formation in hypereutectoid graphitized silicon steels. Izv.
AN SSSR. Met. i gor. delo no.5:127-131 S-0 '64.

(MIRA 1831)

BUNIN, K.P.; ZAKORKO, Zh.B.; POGREBNOY, E.N. [Pohribnyi, E.N.]

Structure formation of hypereutectic graphitized steels. Dop.
AN URSR no.2:205-209 '64. (MIRA 17:5)

1. Dnepropetrovskiy metallurgicheskiy institut. 2. Chlen-korrespondent AN UkrSSR (for Bunin).

ZAKORKO, Zh.B. (Dnepropetrovsk); POGREBNOY, E.N. (Dnepropetrovsk)

Diagrams of the isothermal decomposition of austenite in
graphitizable steel. Izv. AN SSSR. Otd. tekhn. nauk. Met. i gor.
delo no.4:112-116 J1-Ag '63. (MIRA 16:10)

L 19750-63

Pr-4 WH/WW/JD/K

ACCESSION NR: AT3001934

EPR/EPF(c)/EWP(q)/EWT(m)/EWP(B)/BDS

AFFTC/ASD PS-4/

S/2912/62/000/000/0336/0346

AUTHORS: Pogrebnoy, E.N.; Repin, A.K. (Deceased)

TITLE: Changes in structure and shape of graphite inclusions in Fe alloys as a function of the conditions of growth

SOURCE: Kristallizatsiya i fazovyye perekhody. Minsk, Izd-vo AN BSSR, 1962, 336-346

TOPIC TAGS: crystal, crystallization, crystallography, graphite, inclusion, addition, impurity, Fe, Al, Si, Ti, Mn, W, Mo, Cr, austenite, martensite, ferrite, cementite, vacancy, dislocation, micropore, microfissure, malleable, cast iron, steel, diffusion, graphitized, graphitization, martensite,

ABSTRACT: The paper describes experimental findings on the effect of the state of the metallic matrix, the structural and phase nonuniformities along the graphitization front, the possible alignment of austenite-ferrite-cementite lattices with the graphite, and that of impurities and crystalline-structure defects (vacancies, dislocations, micropores, and microfissures of various origin) in graphitized Fe alloys. Typical examples of the broad variety of graphite inclusions found in the metallographic investigations of graphitized steel and malleable cast iron are

Card 1/3

L 19750-63

ACCESSION NR: AT3001934

shown. This multiplicity of forms of graphite inclusions is attributed primarily to the growth conditions of the graphite, depending on the character of the primary structure and the degree of nonuniformity of the matrix structure, the chemical composition, and the conditions of the anneal. A prime opportunity for the formation of graphite inclusions is afforded by shrinkage micropores, placed between the branches of austenite dendrites and along the interphase boundaries. Both the origin and the geometry of such micropores are described. The effect of additions and alloying elements introduced into synthetic cast iron or steel on the growth conditions of the graphite are described, including their effect on the relative growth rate of the graphite in the austenite or ferrite phase, if the additions are concentrated in the austenite during hardening and distort its crystalline lattice significantly. Among such additions are Al, Si, and partially Ti. It is characteristic that these additions accelerate the near-boundary diffusion more strongly than the volumetric diffusion. Therefore, with an increased concentration of Si and Al, the shape of the graphite inclusions changes from spherical to branched. By contrast, the relative growth speed in austenite is reduced by additions that increase the interatomic bonding forces in austenitic carbide phases more strongly and, therefore, loosen up their crystalline lattice. Examples: Mn, W, Mo, and Cr, which concentrate preferably in the carbide phase. Additions that form readily-fusible components affect the shape of graphite inclusions in a peculiar

Cord 2/3

L 19750-63

ACCESSION NR: AT3001934

manner. An investigation of synthetic cast irons with various P contents showed that, if the initial structure of the white cast iron contained a phosphide eutectic and the anneal temperature is higher than its m. p., then the shape of inclusions with an elevated P concentration gradually passes from a blot-shaped to a lamellar shape. The defect formations of the martensite transformation of austenite are discussed, and the nature of the resulting microfissures is examined. Orig. art. has 5 figs.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 16Apr63

ENCL: 00

SUB CODE: CH, PH, MA, EL

NO REF SOV: 019

OTHER: 007

Card 3/3

POGREBNOY, E.N.

Form of graphite inclusions in graphitic steel. Izv.vys.ucheb.
zav.; chern.met. 6 no.1:139-146 '63. (MIRA 16:2)

1. Dnepropetrovskiy metallurgicheskiy institut.
(Steel casting—Metallography)

S/276/63/000/003/005/006
A004/A127

AUTHORS: Krivosheyev, A. Ye., Pogrebnoy, E. N., Fetisov, N. M.

TITLE: The effect of modification on the structure and mechanical properties of cast steel being graphitized

PERIODICAL: Referativnyy zhurnal, Tekhnologiya mashinostroyeniya, no. 3, 1963, 6, abstract 3G42 ("Sb. nauchn. tr. Dnepropetr. metal-lurg. in-t", 1962, no. 49, 165 - 174)

TEXT: Modifying additions effectively affect the structure of cast and annealed graphitized steel. In the complex modification of steel by aluminum + calcium silicon + boron, the boron additions that are added for increasing the hardenability should not exceed 0.01%. Boron additions of more than 0.01% can only be recommended for castings whose ductility may be reduced at high demands made on their hardenability and wear resistance during operation.

[Abstracter's note: Complete translation]

Card 1/1

KRIVOSHEYEV, A.Ye.; POGREBNOY, E.N.; FETISOV, N.M.

Inoculation of steel undergoing graphitization. Lit.proizv.
no.11:28-29 N '62. (MIRA 15:12)
(Steel—Metallurgy)

S/148/63/000/001/017/019
E071/E151

AUTHOR: Pogrebnoy, E.N.

TITLE: On the form of graphite inclusions in a
graphitised steel

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,
Chernaya metallurgiya, no.1, 1963, 139-146

TEXT: From a review of the literature the different shapes
of graphite inclusions met with in graphitised steel are
illustrated, and the conditions necessary for their formation
discussed. These include non-uniformity of the steel matrix,
chemical composition of the steel, initial structure, heat-
treatment, etc.
There are 5 figures.

ASSOCIATION: Dnepropetrovskiy metallurgicheskiy institut
(Dnepropetrovsk Metallurgical Institute)

SUBMITTED: January 12, 1961

Card 1/1

POGREBNOY, E.N.

Effect of preliminary homogenizing on the second-stage
graphitization of steel. Izv. vys. ucheb. zav.; chern. met.
4 no.11:165-169 '61. (MIRA 14:12)

1. Dnepropetrovskiy metallurgicheskiy institut.
(Steel--Heat treatment)
(Metallography)

POGREBNOY, I.T. (g. Gor'kiy)

New development in the organization of the operations of a
freight terminal. Zhel. dor. transp. 47 no.5:26-30 My '65.

(MIRA 18:6)

1. Zamestitel' nachal'nika stantsii Gcr'kiy-Moskovskiy Gor'-
kovskoy dorogi.

POGREBNOY, L.

Lecture tour across England. Sov.profsoiuzy 6 no.14:72-73
0 '58. (MIRA 11:12)

1. Zaveduyushchiy otделom truda i zarabotnoy platy Vsesoyuznogo
TSentral'nogo soveta profsoyuzov.
(Russia--Relations (General) with Great Britain)
(Great Britain--Relations (General) with Russia)

POGREBNOY, L.

Honorable task of our trade unions. Sov.profsoiuzy 16 no.13:12-17
J1 '60. (MIRA 13:8)

1. Zaveduyushchiy otделom truda i zarabotnoy platy Vsesoyuznogo
tsentralnogo soveta prcfsoyuzov.
(Trade unions)

POGREBNOY, L.

Prepare well for the conclusion of collective agreements. Sov.
profsoiuzy 16 no.24:48-51 D '60. (MIRA 14:1)

1. Zaveduyushchiy otdelom truda i zarplaty Vsesoyuznogo tsentral'nogo
soveta profsoyuzov.

(Collective labor agreements)

~~POGREBNOY, L.~~ [Pogrebnoy, L.]

Some experiences with the "For Communist Work" movement in the factories of the Soviet Union. Munka 11 no.10:4-5 0 '61.

1. Szovjet Szakszervezetek Kozponti Tanacsa ber-es munkaügyi osztalyanak vezetője.

POGREBNOY, L.

Wages according to the labor involved. Sov. profsoiuzy 19
no.24:22-25 D '63. (MIRA 17:1)

1. Zavoduyushchiy otdelom Vsesoyuznogo tsentral'nogo soveta
professional'nykh soyuzov po proizvodstvennoy rabote i
zarabotnoy plate v promyshlennosti, stroitel'stve i na trans-
porte.

POGREBNOY, Lavrentiy Ivanovich; NOVOSPASSKIY, V.V., red.; KOROBOVA,
N.D., tekhn. red.

[Commission for wages] Komissiya zarabotnoi platy. Moskva,
Profizdat, 1961. 46 p. (Bibliotekha profsoiuznogo aktivi-
sta, no.23) (MIRA 15:7)
1. Zaveduyushchiy otделom truda i zarabotnoy platy Vsesoyuz-
nogo tsentral'nogo soveta profsoyuzov (for Pogrebnoy).
(Wages)

POGREBNOY, O.G.

Efficient measures for preventing accidents. Bezop.truda v prom.
2 no.10:30 0 '58. (MIRA 11:11)

1. Starshiy inzh. po tekhnike bezopasnosti tresta Tatburneft'.
(Tatar A.S.S.R.--Oil fields--Safety measures)

L 32827-56 EWP(1)/ENT(d) IJP(c) BB/GG/GD

ACC NR: AT6008313

SOURCE CODE: UR/0000/65/000/000/0031/0038

AUTHOR: Pogrebnoy, V. A. (L'vov)

ORG: None

TITLE: A stabilized source of current and voltage for an analog-to-digital converter

SOURCE: AN UkrSSR. Elementy sistem otbora i peredachi informatsii (Elements of systems for selecting and transferring information). Kiev, Naukova dumka, 1965, 31-38

TOPIC TAGS: analog to digital converter, current stabilization, circuit design, voltage stabilization

ABSTRACT: Analog-to-digital converters often employ the code-pulse method of conversion. This method consists in a sequential comparison of the voltage being converted with a set of sample voltages which vary according to a specified law. The series of the output pulses, corresponding to the combination of sample voltages, represents a coded value of this quantity. This combination of sample voltages is required for the compensation of the magnitude of the measured signal at a given instant. A detailed description is given of the circuit considered, together with block diagrams. The stabilized source of current investigated is intended for operation in laboratory conditions, therefore no temperature stabilization is prescribed. The circuit is intended for an analog-to-digital converter, but may be used as a conventional stabil-

Card^{1/2}

L 32827-66

ACC NR: AT6008313

ized source of current or a stabilized source of voltage. Orig. art. has: 3 figures and 3 formulas.

SUB CODE: 09 / SUBM DATE: 06Nov65 / ORIG REF: 001 / OTH REF: 001

LS

Card 2/2

L 08/19-67 EWT(d)/EWP(1) IJP(c) BB/GG/GI
ACC NR: AT6034429

SOURCE CODE: UR/0000/66/000/000/0118/0121

AUTHOR: Pavlyuk, E. I. (L'vov); Pogrebnoy, V. A. (L'vov)

ORG: none

TITLE: A temperature-stable magnetic-semiconductor balancing circuit for analog-to-digital converters 160

SOURCE: AN UkrSSR. Termostoykiye radiotelemetricheskiye sistemy (Heat resistant radiotelemetering systems). Kiev, Naukova dumka, 1966, 118-121

TOPIC TAGS: analog digital converter, transistorized circuit

ABSTRACT: A balancing circuit with high temperature stability used in analog-to-digital converters is described. The circuit, made with magnetic and silicon semiconductor components, includes a second harmonic magnetic modulator, an LC circuit and an amplifier tuned to the second harmonic, a phase detector with an amplifier, a transistorized key circuit, a square wave generator, and a magnetic frequency doubler. The converter works with an input frequency of 900 cps, and its zero drift does not exceed 10^{-15} v, a figure which corresponds to an input voltage of 0.4 μ v at an input impedance of 160 ohms. The converter starting voltage does not exceed 20 μ v, and its releasing voltage does not exceed 40 μ v. Its maximum operation time is 5 msec, and its operating temperature is -20—100C. The converter uses P104 or P106 transistors. Orig. art. has: 1 figure.

SUB CODE: 09/ SUBM DATE: 05Apr66/ ORIG REF: 003/ ATD PRESS: 5103
Card 1/1 LS

ACC NR: AT7001497

SOURCE CODE: UR/0000/66/000/000/0162/0166

AUTHOR: Pogrebnoy, V. A. (L'vov)

ORG: none

TITLE: Analog-to-digital converter balancing circuit using a magnetic second harmonic modulator

SOURCE: AN UkrSSR. Teoriya i praktika ustroystv dlya preobrazovaniya elektro-izmeritel'noy informatsii (Theory and practice of devices for the conversion of electrical measuring information) Kiev, Naukova dumka, 1966, 162-166

TOPIC TAGS: analog digital converter, computer input unit, *computer circuit, transistorized amplifier*

ABSTRACT: A balancing circuit for use in A/D converters is described. To increase its sensitivity (i.e. decrease the threshold level) and lower the zero drift the balancing circuit uses 79NM permalloy cores which form a second harmonic modulator/demodulator arrangement. In this second arrangement the second harmonic (derived from the driver oscillator) which is proportional to the input analog voltage is amplified by a two-stage transistor selective amplifier, detected by an amplifying phase detector, and compared to the amplitude of the second harmonic derived directly from the frequency doubler. The zero drift of the circuit does not exceed 10^{-15} w (at input voltage, 0.4 μ v and input impedance, 160 ohms). The converter threshold voltage does not exceed 20 μ v. A certain hysteresis of the threshold is evident since the release voltage is greater than 10 μ v but always below 20 μ v. The maximum time

Card 1/2

Card 2/2

ANTIPOV, V.A., inzh.; YERMOLENKO, A.Ye., inzh.; POGREBNOY, V.M., inzh.

Fire extinction at the Donets Basin mine "Anna." Bezop.truda v
prom. 6 no.6:7-8 Je '62. (MIRA 15:11)

1. Shakhterskiy trest ugol'nykh predpriyatiy kombinata Rostovugol'
Ministerstva ugol'noy promyshlennosti SSSR.
(Donets Basin—Mine fires)

LITVINENKO, A.U.; POGREBNOY, V.T.

Realgar and some characteristics of the distribution of arsenic
in the ore-bearing formation in the Azov. and Kerch deposits. Lit.
i Pol iskop. no.2:149-152 Mr-Ap '64. (MIRA 17:6)

1. Dnepropetrovskaya geologicheskaya ekspeditsiya.

LITVINENKO, A.U.; POGREBNOY V.T.

New data on the ore potential of Cimmerian sediments in the
region of the Sea of Azov. Dokl. AN SSSR 157 no. 4: 852-855
Ag (MIRA 17:8)

1. Predstavleno akademikom N.M. Strakhovym.

POGREBNOY, Ya., kand.tekhn.nauk; BURIK, O., inzh.-mekhanik

The US-1 universal apparatus. Prom.stroi.i inzh.scor. 4
no.2:56-57 Mr-Ap '62. (MIRA 15:11)
(Concrete reinforcement)

POGREBNOY, Ya., kand.tekhn.nauk; GNIDETS, B., inzh.; TSIMBROVSKIY, A., inzh.

Prestressed reinforced concrete crane girders with twisted
clusters of reinforcement with loop anchors. Prom. stroi.
i inzh. soor. 4 no.3:56-57 My-Je '62. (MIRA 15:7)
(Concrete reinforcement)
(Beams and girders)

S/081/61/000/024/054/086
B150/B102

AUTHOR: Pogrebnoy, Ya. F.

TITLE: Theoretical questions on the setting and strength of concretes

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24, 1961, 365, abstract
24K324 (Sb. "Primeneniye melkikh peskov v betone i metody
podbora sostava betona". M., Gosstroyizdat, 1961, 38 - 43)

TEXT: In fine-sand concrete, cement stone basically performs the function of a paste. Therefore the strength of these concretes will depend very largely on the degree of adhesiveness of the aggregate by the cement stone. The adhesion of the aggregate by the cement stone is based upon the physicochemical reaction of the molecules of the paste with the molecules and atoms of the bonded substance, but this reaction depends first of all on the surface activity of the aggregate, its chemical composition and the conditions under which the process takes place. Fundamental methods are enumerated for increasing the surface activity of the aggregate both mechanically and chemically. Free water exerts considerable influence on the formation and strength of the molecular bonds between the aggregate

Card 1/2

POGREBNOY, Yakov Fedorovich; KOMENDANT, K.P., red.; YEREMINA, I.A.,
tekhn. red.

[Technology of prestressed concrete construction] Tekhno-
logiia predvaritel'no napriazhennogo zhelezobetona. Kiev,
Gosstroizdat USSR, 1963. 157 p. (MIRA 16:12)
(Prestressed concrete construction)

TURKENICH, D.I.; MIKHAYLOV, V.A.; POGREBNOY, Yu.N.; POTRUSAYEV, A.P.

Intensity of flame radiation above an oxygen-blown converter as
parameter for the automatic stoppage of the smelting process.
[Sbor. trud.] TSNIICHM no.29:57-64 '63. (MIRA 17:4)

TURKENICH, D.I.; SMOKTIY, V.V.; POTRUSAYEV, A.P.; POGREBNOY, Yu.N.;
ALEKSEYEV, L.A.; ZIN'KO, B.F.

Iron oxidation and the degree of oxygen use in converter
smelting. Izv. vys. ucheb. zav.; chern. met. 7 no.1:46-51 '64.
(MIRA 17:2)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy
metallurgii.

POGREBNOY, Yu.P.; OSTROVSKIY, G.M.; SLIN'KO, M.G.

Brief news. Khim.prom. no.7:71-73 JI '63.

(MIRA 16:11)

LISHANSKIY, Mark L'vovich; POGREBNIYAK, Aleksandr Dmitriyevich;
TATINTSYAN, Sarkis Vartanovich, nauchn. sotr.; LAPIDUS,
M.A., red.

[Guaranteed wages and business accounting on a collective
farm] Garantirovannaya oplata i khozraschet v kolkhoze.
Moskva, Kolos, 1965. 85 p. (MIRA 18:6)

1. Nachal'nik finansovogo otdela Ministerstva proizvodstva
i zagotovok sel'skokhozyaystvennykh produktov Dagestanskoy
ASSR (for Lishanskiy). 2. Dagestanskiy nauchno-issledova-
tel'skiy institut sel'skogo khozyaystva (for Tatintsyan).

ABSTRACT : No abstract

CARD: 1/1

POGREBNIYAK, A. P.

POGREBNIYAK, A. P.: "The treatment of chronic purulent otitis with antibiotics." Khar'kov Medical Inst. Khar'kov, 1956.
(DISSERTATION for the Degree of Doctor in Medical Science.)

So: Knizhnaya Letopis', No. 18, 1956.

POGREBNIYAK, B.A.

SKOBLIN, A.P., kand.med.nauk; POGREBNIYAK, B.A.

Apparatus for determining the rotary motility of the shoulder
(omorotatometer). Ortop.travm. i protez. 18 no.4:54-56 J1-Ag '57.
(MIRA 11:1)

1. Iz Ukrainського nauchno-issledovatel'skogo instituta ortopedii
i travmatologii im. M.I.Sitenko (dir. - chlen-korrespondent AMN
SSSR prof. N.P.Novachenko)

(SHOULDER

appar. for determ. of rotatory motility)

(ORTHOPEDICS, appar. and instruments

appar. for determ. of rotatory motility of shoulder)

BERDASHKEVICH, Ya.A.; BELOUS, A.M.; BOROVITSKAYA, A.I.; YENGALYCHEVA, N.A.;
POGREBNIYAK, B.A.; SOKOL, G.M.; TARASENKO, N.N.

Occurrence of traumatic orthopedic diseases among rural and
urban population. Ortop., travm. i protez. 26 no.11:60-66
N '65. (MIRA 18:12)

1. Iz Khar'kovskogo instituta protezirovaniya, travmatologii
i ortopedii imeni M.I. Sitenko (direktor - chlen-korrespondent
AMN SSSR prof. N.P. Novachenk). Adres avtorov: Khar'kov,
Pushkinskaya ul. d. 80, Institut imeni M.I. Sitenko.

POGREBNIYAK, B.A.

Distribution and frequency of muscular lesions and deformities in patients with poliomyelitis sequelae. Trudy Ukr. nauch.-issl. inst. ortop. i travn. no.15:65-71 '59 (MIRA 16:12)

1. Iz otdela fiziologii i patomekhaniki (zav. otdelom - doktor med. nauk O.V.Nedrigaylova)Ukrainskogo nauchno-is-sledovatel'skogo instituta ortopedii i travmatologii imeni prof. M.I.Sitenko (dir. - chlen-korrespondent AMN SSSR, prof. N.P.Novachenko).

SKOBLIN, A.P., kand.med.nauk; POGREBNIYAK, B.A.

Apparatus for determining the rotary motion and strength of the
hip joint. Ortop.travm. i protez. 20 no.2:44-47 F '59. (MIRA 12:12)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta ortopedii i
travmatologii im. M.I. Sitenko (dir. - chlen-korrespondent AMN SSSR
prof. N.P. Novachenko).

(HIP, physiol.

rotary motion & strength of joint rotators, appar.
for determ. (Rus))

NEDRIGAYLOVA, O.V., prof.; POGREBNIYAK, B.A., kand.med.nauk

Indications for arthrodesis of the hip joint in patients with
sequelae of poliomyelitis. Ortop., travm. i protez. 24 no.10:
3-11 0 '63. (MIRA 17:5)

1. Iz otdela patomekhaniki (zav. - prof. O.V.Nedrigaylova)
Ukrainskogo instituta ortopedii i travmatologii imeni M.I.Sitenko
(dir. - chlen-korrespondent AMN SSSR prof. N.P.Novachenko).
Adres avtorov: Khar'kov, Pushkinskaya ul., d.80, Institut
ortopedii i travmatologii.

POGREBNIYAK, B.A., kand. med. nauk

Analysis of the results of compound treatment of dropfoot following poliomyelitis. Ortop., travm. i protez. 25 no.2:29-39 P '64.

(MIRA 18:1)

1. Iz otdela fiziologii i patomekhaniki oporno-dvigatel'nogo apparata (zav. - prof. O.V.Nedrigaylova) Ukrainskogo instituta ortopedii i travmatologii imeni M.I.Sitenko (direktor - chlen-korrespondent AMN SSSR prof. N.P.Novachenko). Adres avtora: Khar'kov: Pushkinskaya ul., d. 80, Institut ortopedii i travmatologii.

POGREBNYak, B. A. Cand Med Sci — (diss) "Strength and Bioelectrical
Activity of Muscles of the Lower Extremities in the Normal Person
and in Patients Suffering from the After-effects of Poliomyelitis,"
Khar'kov, 1960, 21 pp, 250 copies (Khar'kov State Medical Institute)
(KL, 49/60, 129)

L 22525-65 EWT(1)/EWA(h) Feb

ACCESSION NR: AP5001552

S/0185/64/009/012/1318/1322

AUTHOR: Pogrebnyak, B. I.

TITLE: Frequency multiplication with the aid of a spark gas discharge at 6.5 mm wavelength

SOURCE: Ukrayins'kyi fizychnyy zhurnal, v. 9, no. 12, 1964, 1318-1322

TOPIC TAGS: millimeter wave generator, harmonic oscillator, frequency multiplication, spark discharge, high frequency discharge

ABSTRACT: The author describes results of frequency multiplication experiments performed at 6.5 mm wavelength in analogy with earlier work in the 3.2 cm band. Figure 1 of the enclosure shows the multiplier construction used, in which best matching was attained between the internal resistance of the magnetron and the low-resistance discharge gap. Several other constructions with quarter-wave matching transformer, and with H-section and rectangular waveguides were tried. The test procedure is described briefly. Frequency doubling with a conversion loss of 45 dB was attained at pressures ranging from 400 to 760 mm Hg (in air).

Cord 1/17